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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,595	10/15/2003	Hiroaki Watanabe	361752002400	1753

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EXAMINER	
NAKARANI, DHIRAJLAL S	

ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/684,595	WATANABE ET AL.	
	Examiner	Art Unit	
	D. S. Nakarani	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,17-20,24 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,17-20,24 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-15, 17-20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mallory et al (U. S. Patent 6,723,431 B2) in view of Murai et al (U. S. Patent 5,770,301), Sawada et al (U. S. Patent 5,112,673), Lee et al (U. S. Patent 5,370,937) and Hofmeister et al (U. S. Patent 6,500,559 B2).

Mallory et al disclose a multilayer metallized barrier polyolefin film comprising biaxially oriented polyolefin substrate such as polypropylene as base layer, at least a first surface thereof including a maleic acid anhydride modified polypropylene, a skin layer on the first surface of either ethylene vinyl alcohol copolymer (EVOH) (Col. 5, lines 40-65) or amorphous polyamide layer (col. 6, lines 30-51), metal such as aluminum deposited on the skin layer at coating thickness yielding an optical density of about 1.5 to 3.0 (Col. 6, lines 3-6), a coating over the metal coating and a heat sealing layer on the surface of the substrate opposite to the metallized surface of the substrate (Col. 3, line 65 to col. Col. 4, line 52, col. 5, line 40 to col. 6, line 2 and col. 12, lines 6-20). The barrier coating is of a polyvinyl alcohol, poyvinylidene chloride or of acrylic resin (Col. 2, lines 44-56). Mallory et al disclose that the EVOH skin layer results in excellent aluminum adhesion to the substrate. Mallory et al disclose that the metallized oriented polypropylene film exhibits excellent bond strength and metal fracture resistance in both adhesive and extrusion lamination applications (Col. 6, lines 6-14). Mallory et al disclose

a total thickness of film structure from about 0.5 mil to about 3.0 mil wherein the substrate is about 77.0 to about 96.0 wt% of the film structure, the metal layer is less than about 0.1 wt% of the film structure and the coating layer is about 3.0 to about 22.0 wt% (i.e. about 0.015 mil to about 0.66 mil (Col. 12, lines 20-30 and col. 10, lines 5-20). Mallory et al disclose that polyvinylidene chloride, acrylic coating, polyvinyl alcohol coating improves sealability and/or barrier property of the film structure (Col. 12, lines 16-20). Mallory et al fail to disclose laminating additional claimed layers and an outer winding layer comprising antiblock component.

Murai et al a laminated film comprising a biaxially oriented substrate such as polyolefin, polyester, polyamide etc (Col.3, line 55 to col. 5, line 8), coated with barrier inorganic coating made of inorganic material such as metal or metal oxide (Col. 6, 35 to col. 7, line 27), and a barrier resin layer covering the barrier inorganic coating with barrier resin such as ethylene vinyl alcohol, polyamide, polyvinyl alcohol, vinylidene chloride copolymer etc (Col. 7, line 28 to col. 8, line 22). Murai et al also disclose a heat sealing layer over the barrier resin layer. The polymer for heat sealing layer includes anhydride modified polyolefin (Col. 10, line 56 to col. 11, line 20). Murai et al disclose oxygen gas permeability 0.01 to 3 cc/m^2.24hr (Col. 10, lines 44-48 and Table 1, Example 9). Murai et al disclose laminating further layer using adhesive resin (Example 10, and col. 11, lines 16-20).

Sawada et al disclose a multilayer film having oxygen barrier properties. Sawada et al teach multiple oxygen barrier layers (Figure 9, Examples 15 and 16)). Sawada et al's adhesive layer a) is a urethane layer.

Lee et al teach bonding polyvinyl alcohol coated film to another film to form polyvinyl alcohol core of laminated film (Example 1).

Hofmeister et al disclose a multilayer barrier film made using adhesive such as polyurethane, blend of a polyolefin resin and a maleic anhydride modified adhesive resin (col. 8. line 35 to col. 10 line 15, ADH 3, ADH 4, ADH 6). Hofmeister et al also disclose addition of anti-blocking agent in the outer layer (MBl MB2, MB 3 and MB5). Hofmeister et al disclose thicknesses of individual layers, which falls within claimed range.

Therefore it would have been obvious to a person of ordinary skill in the art at the time of this invention made to utilize disclosure of Murai et al, Sawada et al, Lee et al and Hofmeister et al in the invention of Mallory et al to make an oxygen impermeable multilayer laminate with multiple layers of barrier resins and bonding metallized barrier layer coated polymer film using either EVOH or PVA as bonding resins and adding antiblock component to outer layer to prevent blocking.

No claims are allowed.

3. Applicant's arguments with respect to claims 1-15, 17-20, 24 and 25 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. S. Nakarani whose telephone number is (571) 272-1512. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D. S. Nakarani
Primary Examiner
Art Unit 1773

Dsn
October 24, 2006.